

## ABSTRACT

Disclosed is a method of modifying polyethylene to increase its ability to resist the transmission of water vapor. The polyethylene is modified to increase long  
5 chain branching resulting in lower water vapor transmission rates in films prepared with the modified polyethylene. The polyethylene can be modified using peroxides, air and even by admixture with high long chain branching content polyethylene. The polyethylene, particularly when in the form of films, can be used for preparing packaging where sorption of flavor, aroma, or colorant  
10 compounds must be minimized.